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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,117	01/12/2005	Mubarik Mahmood Chowdhry	261736US0PCT	6783
22850	7590	03/26/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER CHEUNG, WILLIAM K	
			ART UNIT	PAPER NUMBER
			1713	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/26/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/521,117	CHOWDHRY ET AL.	
	Examiner	Art Unit	
	William K. Cheung	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All. b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>101106, 051705</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

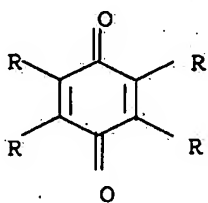
Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

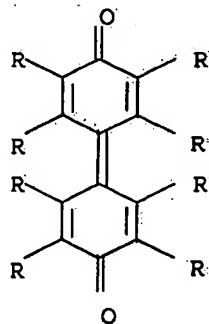
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The invention of claims 1-13 relates to a **process and its product for emulsion polymerization of one or more olefins** comprising **forming a reaction product by reacting a ligand of the formula Ia or Ib or a mixture of at least two of the ligands Ia or Ib**



Ia



Ib

in each of which **R** denotes one or more of the following radicals:

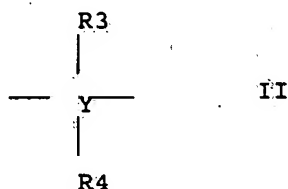
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hydrogen

halogen

nitrile

C₁-C₁₂ alkyl, C₁-C₁₂ alkoxy, C₇-C₁₃ aralkyl or C₆-C₁₄ aryl groups, unsubstituted or substituted by: C₁-C₁₂ alkyl groups, halogens, C₁-C₁₂ alkoxy, C₃-C₁₂ cycloalkyl, C₁-C₁₂ thioether groups, carboxyl groups or sulfo groups present where appropriate in the form of their salts, and also amino groups with hydrogen and/or C₁-C₁₂ alkyl radicals amino groups NR¹R², where R¹ and R² together or separately are hydrogen, C₁-C₁₂ alkyl, C₇-C₁₃ aralkyl or C₆-C₁₄ aryl groups and may additionally form a saturated or unsaturated 5- to 10-membered ring, unsubstituted or substituted by: C₁-C₁₂ alkyl groups, halogens, C₁-C₁₂ alkoxy, C₃-C₁₂ cycloalkyl, C₁-C₁₂ thioether groups, carboxyl groups or sulfo groups present where appropriate in the form of their salts, and also amino groups with hydrogen and/or C₁-C₁₂ alkyl radicals and where identical or different compounds of the formulae Ia and Ib may where appropriate also be bridged by one or more C₁-C₁₂ alkylene, C₂-C₁₂ alkylated azo or formula II bridges



where Y is silicon or germanium and R³ and R⁴ are hydrogen and/or C₁-C₁₂ alkyl, with a phosphine compound PR'₃, where R' is hydrogen, C₁-C₁₂ alkyl, C₄-C₁₂

cycloalkyl, C₇-C₁₅ aralkyl or C₆-C₁₅ aryl groups, or with a diphosphine compound R'₂P-G-PR'₂, where R' is as defined for the phosphine compounds PR'₃ and G is C₁-C₁₂ alkyl, C₄-C₁₂ cycloalkyl, C₇-C₁₅ aralkyl or C₆-C₁₅ aryl groups, and also with a metal compound of the formula M(L²)₂ or M(L²)₂(L¹)_z, where the variables are defined as follows:

M is a transition metal from groups 7 to 10 of the Periodic System of the Elements;

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L^1 is phosphanes $(R^5)_xPH_{3-x}$ or amines $(R^5)_xPH_{3-x}$ with identical or different radicals R^5 , ethers $(R^5)_2O$, H_2O , alcohols $(R^5)OH$, pyridine, pyridine derivatives of the formula $C_5H_5-x(R^5)_xN$, CO , C_1-C_{12} alkyl nitriles, C_6-C_{14} aryl nitriles or ethylenically unsaturated double bond systems, x being an integer from 0 to 3, R^5 is hydrogen, C_1-C_{20} alkyl groups, which may in turn be substituted by $O(C_1-C_6 \text{ alkyl})$ or $N(C_1-C_6 \text{ alkyl})_2$ groups, C_3-C_{12} cycloalkyl groups, C_7-C_{13} aralkyl radicals, and C_6-C_{14} aryl groups,

L^2 is halide ions, $R^6_xNH_{3-x}$, where x is an integer from 0 to 3 and R^6 is C_1-C_{12} alkyl, and also C_1-C_6 alkyl anions, allyl anions, benzyl anions or aryl anions, it being possible for L^1 and L^2 to be linked to one another by one or more covalent bonds,

z is a number from 0 to 4, and utilizing the reaction product immediately to polymerize or copolymerize olefins in water or a solvent mixture with a water content of at least 50% by volume in the presence of an emulsifier and, optionally, of an activator.

Claim 1 is considered indefinite for failing to provide proper punctuation or lack of proper punctuation. One of ordinary skill in art would not be able to understand the scope of the claimed invention of claims 1-13

3. Claim 12 provides for the use of an aqueous dispersion of polyethylene of claim 10, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under

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35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

4. In view of the 112 rejection set forth, the examiner can not determine the metes and bounds of the claims. Therefore, the examiner is unable to proceed with a rejection using a prior art. However, it seems that Kristen et al. (WO 01/44325) is the closest prior art that applicants should considered relating to the patentability of claims 1-13.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William K. Cheung, Ph. D.

Primary Examiner

March 17, 2007

WILLIAM K. CHEUNG
PRIMARY EXAMINER